THE DELAWARE AND HUDSON COMPANY BULLETIN

"The D&H"

MARCH 15, 1929

STATE ROAD
(NEAR LAKE PLACID)

Keep On Keeping On

IF the day looks kinder gloomy
And your chances kinder slim,
If the situation's puzzlin'
And the prospect's awful grim,
If the perplexities keep pressin'
Till hope is nearly gone,
Just bristle up and grit your teeth
And keep on keepin' on.

Frettin' never wins a fight
And fumin' never pays;
There ain't no use in broodin'
In these pessimistic ways;
Smile just kinder cheerful
Though hope is nearly gone,
And bristle up and grit your teeth
And keep on keepin' on.

There ain't no use in growlin'
And grumblin' all the time,
When music's ringing everywhere
And everything's a rhyme.
Just keep on smilin' cheerfully
If hope is nearly gone,
And bristle up and grit your teeth
And keep on keepin' on.

— *Rock Island Magazine.*

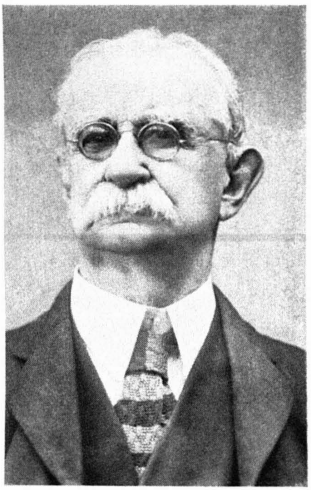
The DELAWARE AND HUDSON COMPANY BULLETIN

Vol. 9 Albany, N. Y., March 15, 1929 No. 6

Our Oldest Pensioner

At Ninety-Two, Veteran Recalls Many Interesting Experiences

THREE times he saw Lincoln, the great emancipator, had as neighbors two men who later became Vice Presidents of the United States, spent a year in Germany, traveled extensively elsewhere, became General Baggage Agent in the course of his service with The Delaware and Hudson Company, and today, in his ninety-second year, he spends his time making scrap books, reading, and writing reminiscences of his home city, Saratoga Springs, N. Y. These are but a few of the many experiences of CORNELIUS E. DURKEE, our oldest pensioned employe, who was born in Shoreham, Vt., in 1837. Next door lived Levi P. Morton, who became vice president during Harrison's administration. In Hinesburg, where his family made its residence when he was four years of age, he lived next to a clergyman whose son, Chester A. Arthur, also became vice president of the nation.



CORNELIUS E. DURKEE

The elder Durkee had been principal of schools in both of these communities and, when CORNELIUS was eight years of age, he took charge of an academy in Galway, N. Y., twelve miles south of Saratoga Springs. In 1848 the family moved to Saratoga, which city has since been MR. DURKEE'S home.

Saratoga was then a gay community with a resident population of 3,400 inhabitants. Even in that early year it had already become the playground of fourteen or fifteen thousand people during the summer season. The year 1849 witnessed the completion of the Saratoga and Washington Railroad from Saratoga to Whitehall, while the Saratoga and Schenectady Railroad was already in operation. The only competition the Spa encountered for the favor of the fashionable class was found in the White Mountains, Newport, and Niagara Falls. People flocked to the Spa from all parts of the country, including the southern states, in addition to thousands of Cubans who visited the health giving springs during the months of July and August.

Almost directly across the street from the site of his present home at 505 Broadway stood the Pavilion Hotel, one of most exclusive of its day. In it one could secure his board for eight or ten dollars a week during May and June, with a slight increase in rates during July and August. At the present time the visitor to the city would have to pay at least that much for a single room for one night's lodging alone.

When about sixteen years of age, CORNELIUS experienced a desire to become a civil engineer. and as a result, saw his first railroad service. The Sacketts Harbor and Saratoga Railroad (now our Adirondack Branch) of which A. F. Edwards was Chief Engineer, had its offices in Saratoga. The elder Durkee, who knew Mr. Edwards, took his son down to the office one day to introduce him to the latter. As a result of the meeting he was hired as a helper in the office, where he built fires, carried ashes, and did all sorts of general work.

While thus employed he assisted the Chief Engineer in compiling some reports on the railroad. which work was probably influential in helping to secure his next position with a party of surveyors on the branch. They started out on snowshoes, his duty being to drag the long, heavy measuring chain through the forest. Although it was hard work, he stuck to it until finally the Chief Engineer instructed the head of the party to put him on the rod and level job, the easiest of all.

When, in 1861, Lincoln was inaugurated for his first term as president, MR. DURKEE attended the ceremonies. He well remembers the tall. gaunt figure of the great emancipator as he stood on the platform erected on the Capitol steps in Washington, D. C. "He was far from handsome," says MR. DURKEE, "but there was a fine, noble look on his face and he was a most impressive speaker."

Feeling a desire for travel he secured a leave of absence and spent a year in Germany. The eastward trip he made on the steamer *Persia*, the Cunard Line's crack ship of that day. It was an old side-wheel boat equipped with sails for auxiliary use. The crossing from New York to Liverpool took twelve days. After short visits in London and Paris, he continued to Saxony. At that time the German people were very friendly to the American visitors and MR. DURKEE made some firm and lasting friendships with the people in that country.

Due to the fact that some very old regulations were still in force he fell afoul of the law on three occasions. There was one old ruling that prohibited talking at a round table, supposedly because of the treachery of the Knights of the Round Table. One evening he and a party of friends were gathered around a round table conversing when the proprietor of the inn called their attention to the fact that they must not talk at a round table. When they ignored his warning some officers entered and arrested them. For the offense they were sentenced to spend one day in jail or pay a fine of one thaler, about seventy-five cents in American money. They chose the latter sentence and dismissed the occurrence from their minds.

Again, while going to see a friend off on a steamer, the party was walking through the streets keeping step from force of habit. There was a law against that too, and again he and his friends were forced to pay a seventy-five cent fine for their "misdemeanor". Still one more fine of the same amount was meted out to him for whistling in the streets at night, this being forbidden by another old law which was on the books for no other reason than that it had never been repealed.

Returning to America he was rejected for military service on account of physical disability. Two regiments, the 30th and the 77th, were sent to the battlefields from Saratoga. He, along with others who were forced to remain at home, joined the home guard and drilled regularly.

While in Washington he came face to face with the President. He knew the Superintendent of Government Telegraph, and while they were visiting in his office one day, President Lincoln walked in to ask the Superintendent to communicate with one of his generals. MR. DURKEE was about to leave when Mr. Lincoln told him to remain seated.

When, after the assassination, Lincoln's body lay in state in the City Hall in New York, he passed by the casket to view the martyred president.

MR. DURKEE recalls his experiences during the historic blizzard of '88, at which time he was Superintendent of what is now our Adirondack Branch. Train service from Troy and Albany to Saratoga was completely tied up for three days. The worst spot on the line was in Canty Cut. The cut was about twenty feet deep and a quarter mile in length at that time, part of it having since been filled in, and the snow filled it completely. Fifty of the inhabitants of Luzerne and Hadley, anxious to get traffic restored, set to work and cleared the cut of snow after twenty-four hours of continuous shoveling.

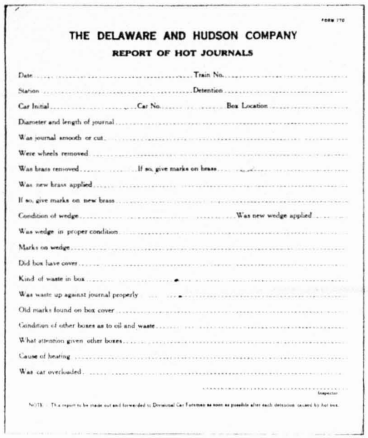
After remaining idle for two years subsequent to the purchase of the Adirondack Branch in 1889 by our company, MR. DURKEE again felt the desire to work for the railroad. He knew General Passenger Agent J. W. Burdick who visited his home on occasion and it was probably at the time of one of these visits that MR. DURKEE expressed his feeling. As a result Mr. Burdick wired him to come to his office and he was given a position in the General Passenger Agent's Office.

(Turn to page 94)

Waste and Oil Reclamation

Experimental Plant at Oneonta Proves That Material Removed From Journal Boxes Responds to Simple Process

EVERYONE connected with railway operation is acquainted with the trouble caused by hot boxes. Such heating failures have been a sufficiently important factor in train operation to direct the attention of both operating and mechanical employes toward the elimination of the costly delays resulting from them. Railroads have been looking forward to a solution of this problem for years. Admittedly, substantial



FORM 172

THE DELAWARE AND HUDSON COMPANY

REPORT OF HOT JOURNALS

Date ..... Train No. .....

Station ..... Detention .....

Car Initial ..... Car No. ..... Box Location .....

Diameter and length of journal .....

Was journal smooth or cut .....

Were wheels removed .....

Was brass removed ..... If so, give marks on brass .....

Was new brass applied .....

If so, give marks on new brass .....

Condition of wedge ..... Was new wedge applied .....

Was wedge in proper condition .....

Marks on wedge .....

Did box have cover .....

Kind of waste in box .....

Was waste up against journal properly .....

Old marks found on box cover .....

Condition of other boxes as to oil and waste .....

What attention given other boxes .....

Cause of heating .....

Was car overloaded .....

Inspector

NOTE—To report to be made out and forwarded to Divisional Car Foreman as soon as possible after each detention caused by hot box.

Figure 1

progress has been made of late, and hot box epidemics, which tried the patience of many an official, have practically disappeared.

Investigations of one phase of the problem have disclosed that lubrication must be more effective. Assuming that a proper grade of oil is used, effective lubrication necessitates the use of packing in the journal box of a quality that will insure delivery of the lubricant to the journal. Of equal importance is the proper treatment of the box by the box packer, who should see to it that the waste is properly adjusted. A definite guide for packing the journal boxes of cars is set forth in the Interchange Rules.

For some time past, lubrication practices on our railroad have been followed very closely and there has been a marked improvement in the hot box situation, particularly during the past five years. Several years ago a form (Fig. 1) was designed for the purpose of analyzing failures and applying remedial measures. This form is very helpful in conducting investigations. At the close of each month a summary is made of the various causes of hot boxes, and a monthly report, by Divisions, is compiled recording the number of failures, the mileage per failure, and the major contributing causes. A copy of this report is sent to the parties interested, on the several Divisions, for review and comparison. Thus a picture is had of the situation each month.

Records of 1,000,000 miles per hot box are not uncommon in passenger train service, due no doubt, to the fact that better opportunity is afforded for caring for the boxes on home lines. Such record performances, however, are unknown in freight service. Unlike the passenger train car, the freight car has a wide distribution and reaches all parts of the United States and Canada. For this reason, and also because of the large number of units in service, the freight car does not get the same attention that a passenger car receives.

Railroads, however, aim to operate their freight as well as passenger trains without interruption. In fact, many freight trains are operated on definite schedules, and it is possible to anticipate the arrival of shipments on a specified date and at a fixed hour. It is apparent, therefore, that delays are not only costly but embarrassing as well.

In the interest of better freight transportation, the Mechanical Division of the American Railway Association recently added a rule known as Number 66 to the code governing the inspection and repairs of freight train cars, which provides for the periodical repacking of journal boxes, after the expiration of twelve months, as indicated by the packing date stencilled on the car. This rule further provides that the boxes shall be repacked

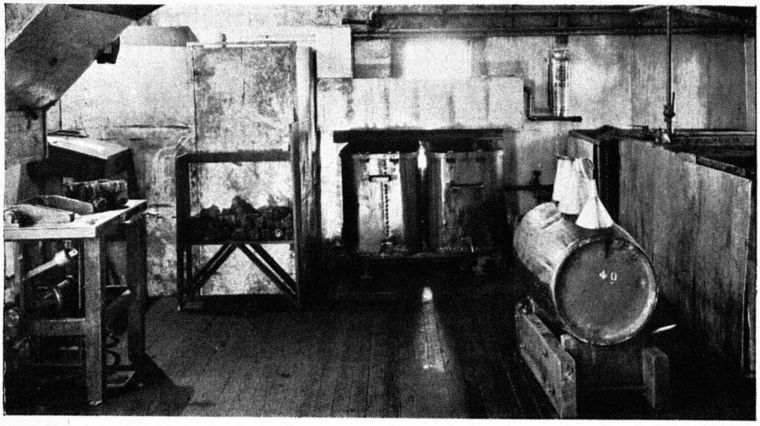
with properly prepared packing (new or renovated) which should meet the A. R. A. specifications. A price for such work is specified and a bill may be rendered to the Car Owner provided the work is performed in the manner defined in Rule 66, which becomes effective January 1, 1930. This date has been extended several times to allow the subscribers to the rules ample time to prepare to properly undertake the work.

New waste and oils are expensive, and this company, not unlike many other railroads, has been for many years reclaiming and renovating the old packing removed from journal boxes. Experience has revealed that the reclaimed product, if properly revived, has better lubricating qualities than the new product and requires less than one-third the amount of new oil that new waste does, because of the utilization of the lubricating oils remaining in the old packing.

During the past several months the reclamation of old packing has been made the subject of special study to ascertain whether a product that would meet the A. R. A. recommended specifications could be produced economically at our own plant. It will be of interest to know that the results have been very satisfactory both as to quality and cost. Our experiments indicate that by the use of chemicals and proper heat treatments, the oil can be satisfactorily cleansed. The greatest difficulty experienced was the elimination of moisture from the oil. This was successfully accomplished under heat treatment, the moisture passing off in the form of vapor. The problem of extracting the foreign substances was solved by chemical treatment, the action of which induced precipitation. In this oil cleaning process, it was our experience that the most essential factor was heat regulation and that the best results were obtained when the mass was maintained at an even temperature. Analyses of the renovated oil indicate that the Standard Practice Specifications for reclaimed oil recommended by the A. R. A. Committee on Lubrication for Cars and Locomotives, have been met. In fact, the renovated product compares favorably with new oils.

Our Oil and Waste Reclaiming plant is situated in the Car Shops at Oneonta, N. Y., where it is operated under the supervision of the Divisional Car Foreman. Oneonta, by reason of its central location, is an excellent distributing point. Uniformity of quality is most desirable and it is believed that a more consistent grade of product can be secured by supplying the railroad from one plant, since a better opportunity for study and concentration on the various phases of reclamation is afforded. Three plants were formerly operated, i.e., Carbondale, Oneonta, and Colonie.

An interesting point in the development of the Oneonta plant is that the layout was revamped without much expense. In order to gain greater efficiency, it was necessary to re-arrange the tanks



South End of Plant. Machine for Making Back End of Rolls on Left

and vats. The only major facility added was a revolving metal cylinder for removing short fibre and foreign substances from the reclaimed waste. A novel machine was devised for making back end rolls, dispensing entirely with the former practice of rolling by hand, thus insuring uniformity of manufacture.

A detailed description of the various operations involved in the reclamation of both waste and oil may be of interest to the reader.

The waste is delivered to the plant in steel containers. It is first placed on a sorting table (A) (See Figure 2), where it is roughly picked over, the packing rolls are pulled apart, and the pieces of babbitt metal and dirt that can be thus removed, are taken out. The next step is to completely submerge the waste in a vat (B) of hot oil (120° Fahr.) where it is agitated to loosen the mass. It is then removed and placed on a perforated rack (C), over the vat, to allow the surplus oil to drain off, after which it is conveyed to a centrifugal machine (D) for further extraction of the old oil. After being subjected to this treatment for a period of ten minutes, the waste is restored to practically its original state of cleanliness. The old oil which has been extracted during this process flows by gravity to a storage tank in the basement of the building.

Following this operation the waste is removed from the centrifugal machine, conveyed to a hopper, and deposited in the elevated end of a perforated metal cylinder (E), which revolves in an inclined plane. The motion of this cylinder loosens the waste and causes the short fibre, dirt, etc., to sift through the perforations. A hopper catches the refuse and deposits it in a four-wheeled car in the basement of the building. The good waste, which remains in the cylinder, passes out at the lower end into a storage basket (F) in a fluffy, resilient condition, ready for saturation. It is then taken to a vat (G) where it is submerged in reclaimed or new oil, heated at a temperature of 190° Fahr., and allowed to soak for a period of two hours. This vat is provided with a perforated metal basket, which may be raised or lowered through a series of levers operated by air. At the end of the saturation period, the waste laden basket is raised to drain until the oil content is three and one-half pints to one pound of waste. The press (H) is used to hasten the process as occasion requires. The waste is then a finished product ready for use.

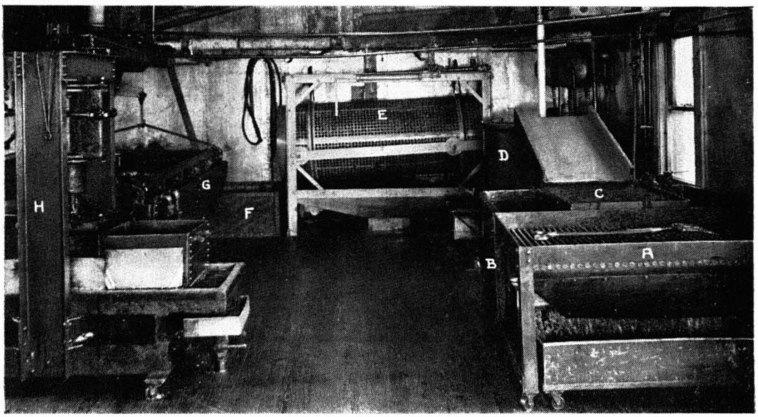


Figure 2

The apparatus for the oil reclamation is relatively simple. The oil flows from the outlet of the centrifugal machine, after being extracted from the waste, passes through a heated baffle plate filter under the floor into a storage tank. From this tank it is pumped into an oil boiling vat (not shown in photograph) where it is subjected to heat treatment at high temperature,

created by steam coils in the bottom of the vat, in order to evaporate all traces of water.

The oil is then drained from this vat into a storage tank located below the floor. The next operation is to pump it into the settling vats, of which there are two, where it is maintained at a temperature of 140° Fahr. and treated with a chemical compound to settle the foreign substances. After this action takes place, the oil is drawn from the top by means of a telescoping pipe in the middle of the tank, a novel arrangement for determining the depth of good oil in the vat. Through this pipe the oil flows to a storage tank in the basement of the building. The quality

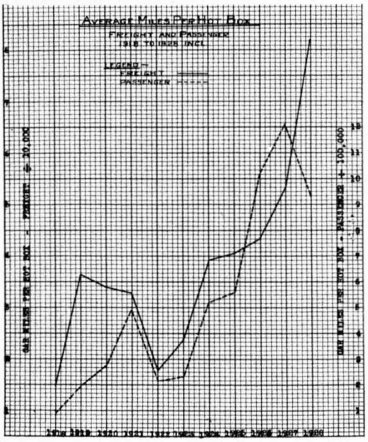


Figure 3

of the finished product is ascertained by immersing a clear strip of glass. When all traces of impurities have disappeared, the oil thus reclaimed is considered satisfactory for use.

The sludge, or sediment, found at the bottom of the vat is released through valves and used as a rough lubricant for center plates, side bearings, etc.

The facilities in this reclamation process are not quite adequate to fully meet all requirements. In fact, it was not considered advisable to expend large sums of money to develop the plant until it was first determined whether we could produce a satisfactory product. However, in view of the excellent progress made, plans for the construction of a modern plant have been approved in connection with the 1929 Improvement Budget.

That the objectives sought have been attained is apparent from an examination of the records. During the twelve months of 1927 the average number of hot boxes per month in freight train service was 306, as compared with 194 for the twelve months of 1928, a decrease of 112, or 37 per cent. On the basis of mileage, the average number of miles per hot box per month in 1927 was 53,274, as against 82,244 in 1928, an increase of 28,970, or 54 per cent. In the accompanying chart (Fig. 3), the performance in freight and passenger train service is recorded from 1918 to 1928 inclusive, to indicate the trend of improvement.

Auxiliary Holds Valentine Party

THE Auxiliary of The Delaware and Hudson Veterans Association held a Valentine party in the Hotel Hampton, Albany, on Thursday, February 14, about fifty members being present to enjoy the festivities. After dinner had been concluded, the party was held in a section of the main dining room which was curtained off for the occasion.

First prize for the most original and attractive valentine was awarded to Mrs. Sidney Mosier of Saratoga Springs, and second prize to Mrs. William Sill of Albany.

Pilgrimage of Forty-Year Group

THE Forty Year Group of the Delaware and Hudson Veterans and their ladies have been invited by the Daughters of the American Revolution of Plattsburg to make their "Pilgrimage" to that historic spot this year. This, the Sixth Annual "Pilgrimage" of the group, is planned for Friday and Saturday, June 21 and 22. All members of the Forty Year Group should reserve these dates. Details of the trip will appear in a later issue of THE BULLETIN.

Unconscious, But Talkative

Two laborers were returning to a construction camp late one night after payday. They had spent most of their wages for goods of a liquid nature and thus had great difficulty in keeping to the path through the woods. Finally they strayed from it altogether and one of them fell down a deep ravine. The other held to a tree and peered into the depths for his companion.

"Are you hurt, Jim?" he called.

"I don't know," came the weak voice from the darkness below, "but I think I'm unconscious."

Matthew Murray

He Assisted in Improving the Design of the Early Steam Engine and Helpea to Construct an Unique Cog-Locomotive

MATTHEW MURRAY is believed to have been born in Newcastle-on-Tyne, England, in 1765. He seems to have made the very best use of his opportunities at school; to have been apprenticed to a millwright or engineer in his native town where he married before the completion of his term of service. He finished his apprenticeship at Stockton-on-Tees and worked as

a journeyman in a mechanic's shop there. Trade becoming bad, leaving his wife with friends, he walked sixty miles to Leeds, where he secured a job with John Marshall as handy man, doing odd jobs about the machinery in his flax mill.

Marshall formed a partnership with Benyon and in 1790 started a mill at Holbeck, Leeds. This was at first driven by a water-wheel, the water being supplied by a Savery engine. In 1793, a steam engine by Boulton and Watt, of twenty-eight horsepower, and driving 900 spindles, superseded the water-wheel and drove the mill for a considerable time.

Murray now made a particular study of the steam engine, and introduced several minor improvements in its working and during the twelve years he remained with Marshall he took up patents for instruments and machines for spinning fibrous materials, etc.

He left Marshall to join a new company for making and repairing machinery and engines. Of the partners William Lister appears to have been a sleeping partner only, James Fenton found most of the capital, David Wood took charge of the construction and design of machinery, and Matthew Murray took charge of the engine building department.

Murray did much to simplify the engine, placing the cylinder in a horizontal position, improving the draft and patenting a fly-wheel and other devices.

There was the usual opposition to the introduction of machinery and a party of "Luddites" visited the works with a view to stopping it. Murray being from home, his wife, after refusing to parley with the leaders, presented a pistol at them and fired; it does not appear that anyone was injured, but they immediately decamped, and did not trouble the place any more.

Space does not permit following in detail Murray's very active life and his substantial developments of the steam engine. In 1811 he appears to have been working in conjunction with Trevithick, and constructing a high pressure engine fitted in 1812 to a captured French Privateer which was used in passenger service between Yarmouth and Norwich. About the same period John Blenkinsop, who was the manager of Brandling's Colliery at Middleton, near Leeds, patented, in 1811, a system of accomplishing the haulage of the coal wagons on the colliery railway there. The line, which communicated with Leeds, three and one-half miles distant, was in three sections, two of them being comparatively level with a rather steep incline between. This was afterward converted to a gravity plane, the

(Turn to page 92)

The
Delaware and Hudson Company
BULLETIN

Office of Publication:
DELAWARE AND HUDSON BUILDING,
ALBANY, N. Y.

PUBLISHED semi-monthly by The Delaware and Hudson Company, for the information of the men who operate the railroad, in the belief that mutual understanding of the problems we all have to meet will help us to solve them for our mutual welfare.

Vol. 9 March 15, 1929 No. 6

Why the Wheels Go Round

WHY are we here? How long are we going to stay here? Where is "here"? In this case it is right here on the job working for The Delaware and Hudson Company. We are here because we are doing the work which we are assigned in a satisfactory manner. More than that, however, we are here for the reason that the Company needs us when it has business enough to keep everyone at work.

Traffic, which is the proper and generally used term for railroad business, is the foundation stone of the entire enterprise. Every railroad employe should be a "traffic getter". It takes a million loaded cars every week to keep the railroads in operation. To meet the rapidly mounting costs of operation it is a case of Traffic, TRAFFIC, and MORE TRAFFIC!

Never has the race for traffic been as swift as it is today; never has competition been so keen. Yet none of that million cars each week help us a bit unless they pass over our lines at some time in transit.

Every employe is a potential traffic getter, either for The Delaware and Hudson Company or for its competitors.

For example, last summer in the hectic season of tourists and daylight-saving time, a lady asked the information clerk when a certain train was due. He replied, "Four o'clock."

"Is that five o'clock daylight time?" she asked.

"Four o'clock standard", he replied.

Three times the same question and answer were repeated before the lady left in disgust, her question unanswered. To be sure, the clerk had instructions to talk standard time, but he had no orders preventing his answering a question, however foolish it may have seemed to him. It is often the folks who ask the most foolish questions who are most in need of, and appreciative of, assistance.

Station forces, yard men, and train crews each have an important part to play in the securing and handling of traffic. As their duties are performed and as they serve the public, so is the service of their line measured and advertised by its patrons. No amount of paid publicity can overcome the incivility of an individual employe.

The general office is the clearing house for information. The men skilled in tariff work, rules, regulations and practices, as well as all other employes, should be constantly alert to increase our business and at all times ready to impart helpful information, thereby taking the "problem" out of transportation, as far as the public is concerned.

Agents and their forces can aid very materially, not only in holding our present traffic, but by their general attitude of helpfulness, by furnishing information promptly and accurately, by their constant interest in shippers' and travelers' welfare, by expediting shipments, and by fair dealing generally.

Finally, as many of us have not already been specifically mentioned, "traffic getting" is everybody's job. Lest everybody's business be nobody's business, just remember that wherever we may work and whatever we may do TRAFFIC PAYS ALL OUR WAGES.

The Safest Place

IN 1927 the number of passengers killed in railway accidents averaged 1.047 per 10,000,000 passengers carried. The corresponding figure for 1926 was 1.749, and for the three years ended with 1925 it was 1.598.

Ten years ago the corresponding average was 2.711; 20 years ago, 6.978; and 30 years ago, 4.535. These figures show striking improvement in the safety of passenger travel.

Of the 82 passengers killed in 1927, only ten were killed as the result of collisions, derailments, or other accidents to trains. The majority of the 82 fatalities occurred to persons who were getting on or off cars or who were struck by trains at stations.

—*Interstate Commerce Commission.*

Mount McMartin

Originally Named For Pioneer Ancestor of Delaware and Hudson Official

WHEN the view of Mt. Colden, a peak in the Adirondacks, twelve miles south of Lake Placid, was used as a cover picture for THE BULLETIN of February 15, we little thought that there might be a possible connection between it and a member of the company's staff. However, since the publication of that issue a very interesting story has come to light concerning the naming of the mountain, which was formerly known as Mt. McMartin, in memory of Duncan McMartin, great-grandfather of JAMES MCMARTIN, our Chief Engineer.

In 1809 The Elba Iron and Steel Company was engaged in exploiting the mineral deposits in the region of North Elba. While the ore deposits in the vicinity were rich, the company was severely handicapped by the lack of transportation facilities to carry its product from the "wilderness" to Lake Champlain for transportation to the markets. Despite these conditions the enterprise was carried on with the hope that they might some day be overcome.

While operations were thus being carried on, the most remarkable discovery of a dam of pure iron ore, across the upper Hudson River (known at this point as the East or Adirondack River) was made by the owners of the inremunerative iron works in North Elba. The tale of this discovery, as told in a letter from David Henderson, head of the party, to Archibald McIntyre, who together with Mr. McMartin, were the chief owners of the existing iron works, rivals the most interesting of fiction. The following account was taken from Wallace's "Adirondacks":

Early one morning an Indian from a Canadian tribe appeared in camp and, opening his blanket, took out a piece of iron ore about the size of a nut, saying: "You want see 'em ore? Me know 'em bed, all same." He was the first Indian to appear in the camp for a period of over three years, and his startling statement immediately aroused the interest of his listeners. He continued, "Over mountain, where water runs pom, pom, pom, over dam like beaver dam, all black and shiny, me find plenty all same." Upon further questioning he informed them that it was about twelve miles distant. While they at first anticipated being led on a "wild goose chase", his statements seemed sufficiently creditable to bear investigation. When asked how much he would charge to remain with the party until Saturday night, this being Monday, he replied, "Dollar, half, and 'bacco." To this moderate demand the party assented, and set off with their packs on their backs.

During the following three days the company, which included Duncan and Malcolm McMartin, Dyer Thompson, John McIntyre, Mr. Henderson, a colored servant, and the Indian, continued through the forest, camping wherever nightfall overtook them. The way became harder Friday, crossing several streams, among them the headwaters of the Ausable River, and another stream which forms the principal source of the Hudson. That night they camped in a narrow pass at the head of North River.

The next morning, after continuing about four miles, they came upon a stream in which they found large lumps of ore, some as large as a pumpkin. There was also a ledge of pure iron ore five feet high running into the river.

Duncan McMartin, his brother, and the Indian went on down the stream a short distance to Lake Sanford while Mr. Henderson and the two other members of the company remained at the ore bed to examine it more completely. They found that it crossed the stream in a vein fifty feet wide.

To commemorate the memory of these men four mountains were named for the company. They are: Mt. Henderson, for David Henderson, leader of the enterprise; Mt. McIntyre, for Archibald McIntyre (cousin of Duncan McMartin); Mt. McMartin, for Duncan McMartin; and Mt. Robertson for Archibald Robertson.

Of additional interest is the fact that a stream also bears the name McMartin, an account of which is contained in a book published in 1871, entitled "Trappers of New York", by Sir William Johnson. It reads:

"Frenchman's Creek is so called, because a Frenchman named Joseph DeGolier located at an early day upon its shores about two miles from its mouth. It has since been called McMartin's creek, after Duncan McMartin, Esquire, who established himself and erected mills upon it many years ago. McMartin was a surveyor and laid out most of the roads in and around Broadalbin. He was a man of wealth and respectability, and was appointed a judge of common pleas in 1818—was master in chancery, &c., &c."

Matthew Murray

(Continued from page 89)

loaded wagons coming down drawing up the empty wagons.

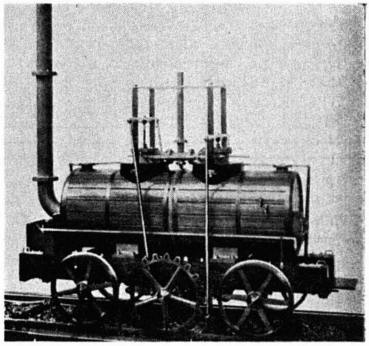
Murray designed and constructed the locomotive for Blenkinsop. It had two vertical double-acting cylinders, partly sunk into the boiler, and very similar to Trevithick's arrangement, but each driving on an intermediate shaft, with pinions working a cog-wheel which engaged with the rack rail on one side of the track. The two shafts were so arranged that the cranks were at right angles, thus insuring certainty in starting, besides dispensing with a fly-wheel. The boiler contained a single flue, and it evaporated eight cubic feet of water an hour with a consumption of seventy-five pounds of coal. The *John B. Jervis*, the latest development in the modern locomotive, with a boiler containing fifty-two flues and a steam pressure of 400 pounds, evaporates about 500 cubic feet of water per hour with a consumption of 3,600 pounds of coal.

Four-way cocks were used for the steam distribution, again following Trevithick's practice, although some years previous Murray had invented several forms of slide-valves including the plain three-ported valve now almost universally used. The engine weighed five tons and cost $1,940.00. Three other engines were afterward supplied to the Middleton line and one to the Coxlodge Railway on the Tyne near Newcastle. The engines ran for many years, and seem to have had very few breakdowns or accidents of a serious character.

The railway was visited by many people and several eminent engineers and scientific men, including J. U. Rastrick (the builder of the *Stourbridge Lion*, the first locomotive moving in America, at Honesdale, on the Delaware and Hudson, August 8, 1829) and James Walker before making their reports to the directors of the Liverpool and Manchester Railway on the working of railways, and it was long one of the sights of the district.

The following account of the first public trial of the engine appeared in the Leeds *Mercury* of June 27, 1812:

> "On Wednesday last a highly interesting experiment was made with a machine constructed by Messrs. Fenton, Murray and Wood of this place under the direction of Mr. John Blenkinsop, the patentee, for the purpose of substituting the agency of steam in the conveyance of coal on the Iron Railway from the mines of J. C. Brandling, Esq., at Middleton, to Leeds.
>
> "This machine is in fact a steam engine of four horsepower, which, with the assistance of cranks turning a cog-wheel and iron cogs placed at one side of the railway, is capable of moving when lightly loaded, at the speed of ten miles an hour.
>
> "At four o'clock in the afternoon, the machine ran from the Coal Staith to the top of Hunslet Moor, where six, and afterward eight waggons of coals, each weighing 3¼ tons, were hooked to the back part. With this immense weight, to which, as it approached the town, was superadded about



Blenkinsop's Locomotive

> fifty of the spectators mounted upon the waggons, it set off on its return to the Coal Staith, and performed the journey, a distance of about a mile and a half, principally on a dead level, in twenty-three minutes without the slightest accident.
>
> "The experiment, which was witnessed by thousands of spectators, was crowned with complete success, and when it is considered that this invention is applicable to all railroads, and that at the works of Mr. Brandling alone the use of fifty horses will be dispensed with, we cannot forbear to hail the invention as a vast public utility and to rank the inventor amongst the benefactors of the country."

On another occasion the engine took a load of thirty loaded coal wagons at a speed of three and one-quarter miles an hour.

Murray was engaged in almost every class of engineering work, including drainage of marsh lands. Having built himself a house close to the works, he had it entirely heated by steam, hence it was known locally as "Steam Hall." He was the first in Leeds to have his works lit with coal gas, and built works to supply the town. The firm built some engines for the Great Western Railway and when finished a testing machine with "live" rollers was built for their trials, this being probably the first instance where such a contrivance was used.

Matthew Murray was of a genial temperament, with a frank, open disposition, and free and accessible to his workmen. He had an intimate perception of design, and although almost self-taught, with little knowledge of mathematics, his designs were so well proportioned that it was very rarely that any alterations were required. A man whose mechanical abilities were, perhaps, inferior to none, his great improvements in the steam engine, flax spinning and other machinery will be a lasting testimony of his success in labor. He died on February 20th, 1826, in his sixty-first year.

The Money Value of Education

Figures Indicate That Schooling is a Paying Investment

BELOW are quoted some abstracts from "The Conference Board Bulletin," dated October 15, 1928, published by the National Industrial Conference Board, Inc., 247 Park Avenue, New York City, on "The Money Value of Education," which may be of interest to the readers of THE BULLETIN.

"Apart from the intangible values of his training to a man of education, has education as such a money value? Granted that schooling in the formal sense is no guarantee that a man can make a good living, and further that the absence of such formal schooling is no bar in some instances to making a great deal of money, there can be little doubt that on the average the time and money spent upon general education bears fruit in increased earning capacity and income."

"The latest evidence on this subject is presented by Dr. E. W. Lord, Dean of the School of Business Administration of Boston University.

"At each stage of life incomes reported are higher as the degree of education advances. It will be noted that as the years advance the income increases, but this increase comes to an end with those over 50 years of age when there is only a common school education, and with those over 55, when a partial or complete high school education was reported. For college trained men, the late fifties show a slightly less income for the average man than do the early fifties, but the maximum is attained in the early sixties."

INCOME AND EDUCATION

MEDIAN INCOME BY AGE GROUPS, ACCORDING TO TYPE OF GENERAL EDUCATION

Age Groups Years	1267 Men reporting attendance at elementary schools only	1295 Men reporting attendance at high school (partial)	1772 Men reporting having finished high school course	557 Men reporting a college A. B. Degree
Under 25	$1,120	$1,400	$1,430	$1,750
25-29	1,556	1,675	1,800	2,400
30-34	1,625	1,742	2,000	3,200
35-39	1,634	1,920	2,450	4,000
40-44	1,700	2,000	2,600	5,200
45-49	1,700	2,150	2,800	5,000
50-54	1,528	2,200	2,800	5,500
55-59	1,500	2,050	2,460	5,300
60-64	1,365	1,850	1,975	6,200

Athletic Association Smoker

A VERY enjoyable smoker was held by the members of The Delaware and Hudson Athletic Association at the Knickerbocker Inn, on the Albany-Schenectady Road, Thursday evening, February 21. By the time the men who had been detained by the scheduled games at the Y. M. C. A. arrived, there were nearly 100 members and guests already enjoying themselves at cards and otherwise biding their time until the entire company had assembled.

Shortly after 9:30 a Dutch lunch was served including sauerkraut, frankfurters, and potatoes, topped off with a plentiful supply of cigars and cigarettes for everyone, while a five-piece orchestra enlivened the party with syncopated music.

Dinner over, the gathering was addressed by PRESIDENT RAY LINDSAY of the Bowling League and F. L. HANLON, Supervisor of Wage and Working Agreements, and President of the Association. MR. HANLON expressed the opinion that there was no finer group of men engaged in athletics in Albany today. J. J. BEALE was highly complimented by the speaker who said, "When 'BEAR' BEALE enters a bowling team his splendid spirit and work add greatly to the team's chances of succeeding." Attention was also called to the fact that MR. BEALE is at present leading the National League of Albany with an average of 193. In concluding, MR. HANLON drew the plaudits of his listeners by calling upon his ever-ready supply of jokes.

The program of entertainment was then set under way by George Ward, youthful master of ceremonies. Miss Anna Johnson's vocal solos, including "The Indian Love Call", were warmly received. Several numbers by the Hancox brothers, banjo artists, accompanied by Irving Rosenholtz, a trio which is fast becoming famous among Delaware and Hudson folks, followed.

The main features of the program were fancy dancing by Capital District girls and a boxing exhibition by a group of Father Hogan's boys from Ballston Lake. These boxers, ranging in weight from sixty to 120 pounds, furnished thrills aplenty for the spectators.

Our Oldest Pensioner

(Continued from page 84)

In this capacity he had charge of the printing of tickets and advertising in the newspapers along the line. A vigorous advertising campaign was being carried on at that time in all of the local newspapers from Wilkes-Barre and Binghamton to Rouses Point. The cost of advertising was paid in free transportation for the editors and reporters of the newspapers. This practice was later prohibited by law. Upon the death of General Baggage Agent Pease, MR. DURKEE was appointed to fill that position.

One of the bright lights in the history of Saratoga in which our company's employes also took a very active part, was the series of floral fetes held in that city beginning in 1894. MR. DURKEE saw in them the possibility of increasing the passenger revenue of the company. He therefore requested and obtained permission to go to New Orleans and attend the Mardi Gras celebration. While in that city he was received by the sponsors of the festivities and after it was over bought twenty of the floats for the purpose of using them in the floral fete. He hired three of the men who had built the floats to dismantle and pack them in freight cars for transportation to Saratoga and engaged them to come to Saratoga and rebuild them. In this he was successful and by the time the floral fete was under way that year a very imposing array of floats was ready.

It is only natural that one should ask a man of MR. DURKEE'S age to what he attributes his longevity. To this he answers that he has simply lived a temperate life. For a time he smoked one or two cigars daily, a practice which he abandoned some years ago. While in Germany he drank beer for the simple reason that the water was very poor, however, he has always been temperate in that too. Each year when possible he has taken a vacation to travel. It is his opinion that the change of environment and meeting of many people strengthens a person for his duties of another year. While his health still permitted him to be out of doors he spent much of his time in the flower garden on the grounds of his home, having always been a great lover of flowers. He is also known as a friend of birds; each year a number of them make their nests in bird houses on his estate. Reading and compiling scrap books are perhaps his favorite hobbies. In his home he has a collection of over 4,000 books. When he is not reading he spends many hours listening to the daily radio programs. His was the first privately owned set in the city and he has tuned in all of the larger stations in this country and some European countries.

Due to his inability to attend their meetings, MR. DURKEE has cancelled his memberships in various fraternal organizations. He was a charter member of the Masonic Order in Saratoga, and was for twenty-five years foreman of the Saratoga Fire Department.

Clicks from the Rails

Clerk to President

Still another clerk has risen from the ranks to the presidency of one of America's large railroads; he is John J. Pelley who in 1889 was employed by the Illinois Central as a station clerk and on March 1, 1929, was elected president of the New York, New Haven, and Hartford Railroad Company to succeed the late E. J. Pearson.

His rise began in 1902 when he became assistant foreman of a track gang, followed quickly by the following appointments: general foreman, 1903, supervisor, 1904, assistant yard master, 1906, roadmaster, 1908, superintendent, 1911, general superintendent, 1917, chairman of committee on car service, 1920, general manager, 1923, vice president in charge of operations, 1924, president of the Central of Georgia, 1926, and the leadership of the Ocean Steamship Company of Savannah.

* * *

Telegrapher at 82

Idleness is unhealthy for a person believes F. A. Frost who is still at the telegraph key after fifty-five years of service. Mr. Frost, now in his eighty-second year, learned telegraphy while a guard in the men's reformatory at Anamosa, Iowa.

He estimates that he has delivered over 10,000 train orders, sometimes under adverse conditions, without once failing to get his message through. During a blizzard in 1886, while working at Mt. Auburn, Iowa, he worked continuously for seventy-two hours to aid snow plow crews to open up the road.

Mr. Frost sends with his right hand, but when receiving he holds the key in that hand and writes with his left. He can also receive two messages at one time, writing one down and retaining the other in his mind.

* * *

Senorita is an Engineer

Recent press dispatches from Spain announce that Miss Pilar Careaga, aristocratic daughter of the Count of Cadagua, has been appointed engineering chief of the Northern Railway after qualifying as a locomotive engineer. She is now studying the operation of trains between Madrid and the French Frontier.

On Ferry 46 Years

Captain William Frost has been piloting ferry boats across the Hudson River continuously for the past forty-six years and eight months, during which he has made 465,536 crossings, or a distance equal to fourteen times around the world. The only instance when he has been absent from the service was lost during the past two years when he was ill for six weeks.

His entire life has been spent in Hudson County, N. J., where he has been employed by the Hoboken Ferry Company and its successor, the Lackawanna Railroad. He is an enthusiastic pedestrian; he never rides if time permits him to walk to his usual destinations.

* * *

A Bump of Experience

Dan Yovetch, fourteen-month old Kansas City youngster, will have "one to tell the gang about" when he grows up. While his parents were waiting for a train he started out "on his own" and wandered on the track in the path of a moving switcher. A negro saw the child and flagged the engine, but too late to prevent its running over the spot where the curly little head had disappeared. Imagine the joy of the stricken parents when they found that his sole injury was a bump on his head, suffered when he raised up to see what was going on.

* * *

Speed Wanted

Motorists who are so fond of speeding should not fail to cross the Miami Viaduct in Florida. Approaching the viaduct, the driver is confronted with a sign reading, "You must go 35 miles per hour over this viaduct." Those who do not heed the sign are picked up by local traffic officers and charges are preferred against them.

* * *

World's Highest Railroad

According to a recent magazine article the highest railroad in the world is the one in Peru which goes up, and past, the Cerro de Panco Copper mines, and rises 17,355 feet in the Andes.

Airport in Mid-Ocean

According to newspaper reports of recent date, construction of a seadrome to be anchored in the Atlantic Ocean, midway between New York and Bermuda, is about to begin. When completed it will be 1,200 feet long by 200 feet wide at the ends, and 400 feet wide at the center. Six thousand tons of steel and 2,000 tons of iron will be used.

To hold the seadrome in place chains 21,050 feet long will be attached to specially designed sea anchors and piling, which will extend eighty feet below the surface, will operate hydraulically within sheaths to counteract the effects of waves and wind. A crew of forty-three men will be in charge of the floating airport and will care for the seaplanes, operate a machine shop, run a hotel, and restaurant, and guide planes by means of radio direction finders.

* * *

Deserts the Rods

James Eads How, known as the "Millionaire Hobo," has given up riding the rods. Instead, he intends to become a "tin can tourist" which, translated from "Ho" language means he will travel by automobile in the future. According to press reports he said, in addition, "Most of the 'boes already have deserted the trains for the highways and I am going to follow suit." Perhaps the freight trains are being "wheeled" at too fast a rate for the "knights of the road", or again, the railroads' police forces may be too vigilant for their personal comfort.

* * *

"The Tario Special"

Railway Age of January 18, carries the following note of particular interest to Delaware and Hudson folks:

"A strong movement is on foot to change the name of the 'Laurentian,' on the Delaware and Hudson, to the 'Tario Special,' since the three Tario brothers practically monopolize the run. John Tario is conductor, Ezra Tario is trainman, and Obie Tario is flagman. Their combined service age is 132 years, nearly enough to bid in any job."

Opportunity

MASTER of human destinies am I,
Fame, love and fortune on my foot-
steps wait,
Cities and fields I walk; I penetrate
Deserts and seas remote, and passing by
Hovel and mart and palace, soon or late
I knock unbidden once at every gate!
If sleeping wake: If feasting rise before
I turn away. It is the hour of fate
And they who follow me reach every state
Mortals desire, and conquer every foe
Save death; but those who doubt or hesitate
Condemned to failure, penury and woe,
Seek me in vain and uselessly implore:
I answer not, and I return no more.

— By John J. Ingalls.

(Roosevelt's favorite poem)